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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|------------------------------|----------------------|---------------------|------------------------|--|
| 10/595,458 | 04/20/2006 | Kazunori Yoshino | 09450/0204219-US0 | 09450/0204219-US0 9971 | |
| 7278 DARBY & DA | 7590 11/27/2007 ARBY P.C. | | EXAMINER | | |
| P.O. BOX 770 Church Street Station New York, NY 10008-0770 | | | NGUYEN, HOANG M | | |
| | | | ART UNIT | PAPER NUMBER | |
| 110W 101K, 11 10000 0770 | | | 3748 | | |
| • | | | | | |
| | | | MAIL DATE | DELIVERY MODE | |
| | | • | 11/27/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|---|------------------------------------|------------------------------|--|--|--|--|
| Office Action Commence | 10/595,458 | YOSHINO, KAZUNORI | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Hoang M. Nguyen | 3748 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory end will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| | action is non-final. | | | | | |
| 3) Since this application is in condition for allowan | nce except for formal matters, pro | secution as to the merits is | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | • | | | | | |
| 4)⊠ Claim(s) <u>1-7</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-7</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner | - | | | | | |
| 10) The drawing(s) filed on is/are: a) acce | | xaminer | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a)⊠ All b)☐ Some * c)☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date <u>4/20/06</u> . 6) Other: | | | | | | |

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Claim 7 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 6. See MPEP § 608.01(n). Accordingly, the claim 7 has not been further treated on the merits.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 6, the phrase "from another" is unclear.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6986251 (Radcliff et al).

Radcliff et al discloses an organic turbine system for use with an internal combustion engine 11 comprising an evaporator 19 for utilizing waste heat from the engine exhaust and oil cooler 16 exhaust to drive a turbine 21 to boost the engine power through electric generator 26, hydraulic pumps 23, 32 being driven by the engine

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11. Note there are three coolers: oil cooler 16, radiator 14, and charge cooler 18 connected with a turbocharger 17.

Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by US 5327987 (Abdelmalek).

Abdelmalek discloses an organic turbine system for use with an internal combustion engine 101 comprising an evaporator 107 for utilizing waste heat from the engine exhaust and oil cooler 16 exhaust to drive a turbine 109 to generate electricity to boost the engine power through an electric motor 102, hydraulic pump 104 being driven by the engine 101.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 5327987 (Abdelmalek) in view of U.S. 6987251 (Radcliff et al). Abdelmalek discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose three different coolers. Radcliff is relied upon to disclose three coolers: oil cooler 16, radiator 14, and charge cooler 18 connected with a turbocharger 17. It would have been obvious at the time the invention was made to a person having

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ordinary skill in the art to use three coolers in Abdelmalek as taught by Radcliff et al for the purpose of improving the cooling efficiency.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Johnson and Tang disclose hybrid vehicle using waste heat for driving turbine for power boosting purpose.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HOANG NGUYEN PRIMARY EXAMINER ART UNIT 3748

Hoang Minh Nguyen 11/24/2007